

Variable	Mean	SD	Min	Max
Age	34.5	10.2	21	55
Gender				
Male	52.1	49.8	0	100
Female	47.9	50.2	0	100
Marital status				
Married	68.3	48.5	0	100
Single	31.7	49.5	0	100
Education				
High school	15.2	12.1	0	30
College	45.8	25.3	0	100
Postgraduate	39.0	42.6	0	100
Income				
Low	22.5	18.7	0	50
Medium	35.4	22.1	0	70
High	42.1	29.2	0	100
Occupation				
Manager	18.9	15.4	0	40
Professional	32.1	28.5	0	70
Service	49.0	35.2	0	100
Unemployed	10.0	10.0	0	30
Health status				
Good	75.3	42.1	0	100
Fair	24.7	43.8	0	100
Poor	0.0	0.0	0	0
Smoking status				
Smoker	35.6	48.9	0	100
Nonsmoker	64.4	51.1	0	100
Alcohol consumption				
Regular	12.3	11.5	0	30
Occasional	28.7	19.2	0	50
Never	59.0	39.3	0	100
Exercise frequency				
Daily	15.8	13.2	0	40
Weekly	30.1	21.5	0	60
Monthly	45.9	32.8	0	100
Never	8.2	9.5	0	20

<120> Modulating Robo: Ligand Interactions

<140>

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<151> 1997-11-14

<151> 1998-04-07

<170> PatentIn Ver. 2.0

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Lys	Pro	Tyr	Phe	Leu	Lys	Glu	Ile	Pro	Ile	Gln	Asp	Val	Ala	Ile	Gln
	690					695					700				
Asp	Phe	Thr	Cys	Asp	Asp	Gly	Asn	Asp	Asp	Asn	Ser	Cys	Ser	Pro	Leu
705					710					715					720
Ser	Arg	Cys	Pro	Thr	Glu	Cys	Thr	Cys	Leu	Asp	Thr	Val	Val	Arg	Cys
				725					730					735	
Ser	Asn	Lys	Gly	Leu	Lys	Val	Leu	Pro	Lys	Gly	Ile	Pro	Arg	Asp	Val
			740					745					750		
Thr	Glu	Leu	Tyr	Leu	Asp	Gly	Asn	Gln	Phe	Thr	Leu	Val	Pro	Lys	Glu
		755					760					765			
Leu	Ser	Asn	Tyr	Lys	His	Leu	Thr	Leu	Ile	Asp	Leu	Ser	Asn	Asn	Arg
		770				775					780				
Ile	Ser	Thr	Leu	Ser	Asn	Gln	Ser	Phe	Ser	Asn	Met	Thr	Gln	Leu	Leu
785					790					795					800
Thr	Leu	Ile	Leu	Ser	Tyr	Asn	Arg	Leu	Arg	Cys	Ile	Pro	Pro	Arg	Thr
				805					810					815	
Phe	Asp	Gly	Leu	Lys	Ser	Leu	Arg	Leu	Leu	Ser	Leu	His	Gly	Asn	Asp
			820					825					830		
Ile	Ser	Val	Val	Pro	Glu	Gly	Ala	Phe	Asn	Asp	Leu	Ser	Ala	Leu	Ser
		835					840					845			
His	Leu	Ala	Ile	Gly	Ala	Asn	Pro	Leu	Tyr	Cys	Asp	Cys	Asn	Met	Gln
		850				855					860				

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Trp	Leu	Ser	Asp	Trp	Val	Lys	Ser	Glu	Tyr	Lys	Glu	Pro	Gly	Ile	Ala	
865					870					875					880	
Arg	Cys	Ala	Gly	Pro	Gly	Glu	Met	Ala	Asp	Lys	Leu	Leu	Leu	Thr	Thr	
				885					890					895		
Pro	Ser	Lys	Lys	Phe	Thr	Cys	Gln	Gly	Pro	Val	Asp	Val	Asn	Ile	Leu	
				900					905					910		
Ala	Lys	Cys	Asn	Pro	Cys	Leu	Ser	Asn	Pro	Cys	Lys	Asn	Asp	Gly	Thr	
		915					920					925				
Cys	Asn	Ser	Asp	Pro	Val	Asp	Phe	Tyr	Arg	Cys	Thr	Cys	Pro	Tyr	Gly	
	930					935					940					
Phe	Lys	Gly	Gln	Asp	Cys	Asp	Val	Pro	Ile	His	Ala	Cys	Ile	Ser	Asn	
945					950					955					960	
Pro	Cys	Lys	His	Gly	Gly	Thr	Cys	His	Leu	Lys	Glu	Gly	Glu	Glu	Asp	
				965					970					975		
Gly	Phe	Trp	Cys	Ile	Cys	Ala	Asp	Gly	Phe	Glu	Gly	Glu	Asn	Cys	Glu	
			980					985					990			
Val	Asn	Val	Asp	Asp	Cys	Glu	Asp	Asn	Asp	Cys	Glu	Asn	Asn	Ser	Thr	
		995					1000					1005				
Cys	Val	Asp	Gly	Ile	Asn	Asn	Tyr	Thr	Cys	Leu	Cys	Pro	Pro	Glu	Tyr	
	1010					1015					1020					
Thr	Gly	Glu	Leu	Cys	Glu	Glu	Lys	Leu	Asp	Phe	Cys	Ala	Gln	Asp	Leu	
1025					1030					1035					1040	
Asn	Pro	Cys	Gln	His	Asp	Ser	Lys	Cys	Ile	Leu	Thr	Pro	Lys	Gly	Phe	
				1045					1050					1055		
Lys	Cys	Asp	Cys	Thr	Pro	Gly	Tyr	Val	Gly	Glu	His	Cys	Asp	Ile	Asp	
		1060					1065						1070			
Phe	Asp	Asp	Cys	Gln	Asp	Asn	Lys	Cys	Lys	Asn	Gly	Ala	His	Cys	Thr	
	1075						1080					1085				
Asp	Ala	Val	Asn	Gly	Tyr	Thr	Cys	Ile	Cys	Pro	Glu	Gly	Tyr	Ser	Gly	
	1090					1095					1100					
Leu	Phe	Cys	Glu	Phe	Ser	Pro	Pro	Met	Val	Leu	Pro	Arg	Thr	Ser	Pro	
1105					1110					1115					1120	
Cys	Asp	Asn	Phe	Asp	Cys	Gln	Asn	Gly	Ala	Gln	Cys	Ile	Val	Arg	Ile	
			1125					1130					1135			
Asn	Glu	Pro	Ile	Cys	Gln	Cys	Leu	Pro	Gly	Tyr	Gln	Gly	Glu	Lys	Cys	
		1140					1145						1150			
Glu	Lys	Leu	Val	Ser	Val	Asn	Phe	Ile	Asn	Lys	Glu	Ser	Tyr	Leu	Gln	
	1155					1160						1165				
Ile	Pro	Ser	Ala	Lys	Val	Arg	Pro	Gln	Thr	Asn	Ile	Thr	Leu	Gln	Ile	
	1170					1175					1180					
Ala	Thr	Asp	Glu	Asp	Ser	Gly	Ile	Leu	Leu	Tyr	Lys	Gly	Asp	Lys	Asp	
1185					1190					1195				1200		
His	Ile	Ala	Val	Glu	Leu	Tyr	Arg	Gly	Arg	Val	Arg	Ala	Ser	Tyr	Asp	
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 1 5 10 15
 Leu Met Glu Ile Pro Ala Asn Leu Pro Glu Gly Ile Val Glu Ile Arg
 20 25 30
 Leu Glu Gln Asn Ser Ile Lys Ala Ile Pro Ala Gly Ala Phe Thr Gln
 35 40 45
 Tyr Lys Lys Leu Lys Arg Ile Asp Ile Ser Lys Asn Gln Ile Ser Asp
 50 55 60
 Ile Ala Pro Asp Ala Phe Gln Gly Leu Lys Ser Leu Thr Ser Leu Val
 65 70 75 80
 Leu Tyr Gly Asn Lys Ile Thr Glu Ile Ala Lys Gly Leu Phe Asp Gly
 85 90 95
 Leu Val Ser Leu Gln Leu Leu Leu Leu
 100 105

<210> 4
 <211> 138
 <212> PRT
 <213> human

<400> 4
 Glu Gly Ala Phe Asn Gly Ala Ala Ser Val Gln Glu Leu Met Leu Thr
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 Gly Asn Gln Leu Glu Thr Val His Gly Arg Gly Phe Arg Gly Gly Leu
 20 25 30
 Ser Gly Leu Lys Thr Leu Met Leu Arg Ser Asn Leu Ile Gly Cys Val
 35 40 45
 Ser Asn Asp Thr Phe Ala Gly Leu Ser Ser Val Arg Leu Leu Ser Leu
 50 55 60
 Tyr Asp Asn Arg Ile Thr Thr Ile Thr Pro Gly Ala Phe Thr Thr Leu
 65 70 75 80
 Val Ser Leu Ser Thr Ile Asn Leu Leu Ser Asn Pro Phe Asn Cys Asn
 85 90 95
 Cys His Leu Gly Ala Gly Leu Gly Lys Trp Leu Arg Lys Arg Arg Ile
 100 105 110
 Val Ser Gly Asn Pro Arg Cys Gln Lys Pro Phe Phe Leu Lys Glu Ile
 115 120 125
 Pro Ile Gln Gly Val Gly His Pro Gly Ile
 130 135

<210> 5
 <211> 160
 <212> PRT
 <213> human

<220>
 <221> misc_feature
 <222> (121)..(150)

<223> note="Xaa signifies gap in sequence"

<400> 5

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Glu Asn Gln Asp Asp Cys Arg Asp His Arg Cys Gln Asn Gly Ala Gln
20 25 30
Cys Met Asp Glu Val Asn Ser Tyr Ser Cys Leu Cys Ala Glu Gly Tyr
35 40 45
Ser Gly Gln Leu Cys Glu Ile Pro Pro His Leu Pro Ala Pro Lys Ser
50 55 60
Pro Cys Glu Gly Thr Glu Cys Gln Asn Gly Ala Asn Cys Val Asp Gln
65 70 75 80
Gly Asn Arg Pro Val Cys Gln Cys Leu Pro Gly Phe Gly Gly Pro Glu
85 90 95
Cys Glu Lys Leu Leu Ser Val Asn Phe Val Asp Arg Asp Thr Tyr Leu
100 105 110
Gln Phe Thr Asp Leu Gln Asn Trp Xaa Arg Xaa Asn Ile Thr Leu Gln
115 120 125
Val Phe Thr Ala Glu Asp Asn Gly Ile Leu Leu Tyr Asn Gly Gly Asn
130 135 140
Asp His Ile Ala Val Xaa Leu Tyr Xaa Gly His Val Arg Phe Ser Tyr
145 150 155 160

<210> 6

<211> 103

<212> PRT

<213> human

<400> 6

Gln Cys His Ile Ser Asp Gln Gly Glu Pro Tyr Cys Leu Cys Gln Pro
1 5 10 15
Gly Phe Ser Gly Glu His Cys Gln Gln Glu Asn Pro Cys Leu Gly Gln
20 25 30
Val Val Arg Glu Val Ile Arg Arg Gln Lys Gly Tyr Ala Ser Cys Ala
35 40 45
Thr Ala Ser Lys Val Pro Ile Met Glu Cys Arg Gly Gly Cys Gly Pro
50 55 60
Gln Cys Cys Gln Pro Thr Arg Ser Lys Arg Arg Lys Tyr Val Phe Gln
65 70 75 80
Cys Thr Asp Gly Ser Ser Phe Val Glu Glu Val Glu Arg His Leu Glu
85 90 95
Cys Gly Cys Leu Ala Cys Ser
100

<210> 7

<211> 1480

<212> PRT
 <213> Drosophila melanogaster

<400> 7

Met	Ala	Ala	Pro	Ser	Arg	Thr	Thr	Leu	Met	Pro	Pro	Pro	Phe	Arg	Leu
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Gln	Leu	Arg	Leu	Leu	Ile	Leu	Pro	Ile	Leu	Leu	Leu	Leu	Arg	His	Asp
			20					25					30		
Ala	Val	His	Ala	Glu	Pro	Tyr	Ser	Gly	Gly	Phe	Gly	Ser	Ser	Ala	Val
		35					40					45			
Ser	Ser	Gly	Gly	Leu	Gly	Ser	Val	Gly	Ile	His	Ile	Pro	Gly	Gly	Gly
	50					55					60				
Val	Gly	Val	Ile	Thr	Glu	Ala	Arg	Cys	Pro	Arg	Val	Cys	Ser	Cys	Thr
	65				70					75					80
Gly	Leu	Asn	Val	Asp	Cys	Ser	His	Arg	Gly	Leu	Thr	Ser	Val	Pro	Arg
				85					90					95	
Lys	Ile	Ser	Ala	Asp	Val	Glu	Arg	Leu	Glu	Leu	Gln	Gly	Asn	Asn	Leu
			100					105					110		
Thr	Val	Ile	Tyr	Glu	Thr	Asp	Phe	Gln	Arg	Leu	Thr	Lys	Leu	Arg	Met
		115					120					125			
Leu	Gln	Leu	Thr	Asp	Asn	Gln	Ile	His	Thr	Ile	Glu	Arg	Asn	Ser	Phe
	130					135					140				
Gln	Asp	Leu	Val	Ser	Leu	Glu	Arg	Leu	Asp	Ile	Ser	Asn	Asn	Val	Ile
	145				150					155					160
Thr	Thr	Val	Gly	Arg	Arg	Val	Phe	Lys	Gly	Ala	Gln	Ser	Leu	Arg	Ser
				165					170					175	
Leu	Gln	Leu	Asp	Asn	Asn	Gln	Ile	Thr	Cys	Leu	Asp	Glu	His	Ala	Phe
			180					185					190		
Lys	Gly	Leu	Val	Glu	Leu	Glu	Ile	Leu	Thr	Leu	Asn	Asn	Asn	Asn	Leu
		195					200					205			
Thr	Ser	Leu	Pro	His	Asn	Ile	Phe	Gly	Gly	Leu	Gly	Arg	Leu	Arg	Ala
	210					215					220				
Leu	Arg	Leu	Ser	Asp	Asn	Pro	Phe	Ala	Cys	Asp	Cys	His	Leu	Ser	Trp
	225				230					235					240
Leu	Ser	Arg	Phe	Leu	Arg	Ser	Ala	Thr	Arg	Leu	Ala	Pro	Tyr	Thr	Arg
				245					250					255	
Cys	Gln	Ser	Pro	Ser	Gln	Leu	Lys	Gly	Gln	Asn	Val	Ala	Asp	Leu	His
			260					265					270		
Asp	Gln	Glu	Phe	Lys	Cys	Ser	Gly	Leu	Thr	Glu	His	Ala	Pro	Met	Glu
		275					280					285			
Cys	Gly	Ala	Glu	Asn	Ser	Cys	Pro	His	Pro	Cys	Arg	Cys	Ala	Asp	Gly
	290					295					300				
Ile	Val	Asp	Cys	Arg	Glu	Lys	Ser	Leu	Thr	Ser	Val	Pro	Val	Thr	Leu
	305				310					315					320
Pro	Asp	Asp	Thr	Thr	Asp	Val	Arg	Leu	Glu	Gln	Asn	Phe	Ile	Thr	Glu
				325					330					335	

Leu	Pro	Pro	Lys 340	Ser	Phe	Ser	Ser	Phe 345	Arg	Arg	Leu	Arg	Arg 350	Ile	Asp
Leu	Ser	Asn 355	Asn	Asn	Ile	Ser	Arg 360	Ile	Ala	His	Asp	Ala 365	Leu	Ser	Gly
Leu	Lys 370	Gln	Leu	Thr	Thr	Leu 375	Val	Leu	Tyr	Gly	Asn 380	Lys	Ile	Lys	Asp
Leu 385	Pro	Ser	Gly	Val	Phe 390	Lys	Gly	Leu	Gly	Ser 395	Leu	Arg	Leu	Leu	Leu 400
Leu	Asn	Ala	Asn	Glu 405	Ile	Ser	Cys	Ile	Arg 410	Lys	Asp	Ala	Phe	Arg 415	Asp
Leu	His	Ser	Leu 420	Ser	Leu	Leu	Ser	Leu 425	Tyr	Asp	Asn	Asn	Ile 430	Gln	Ser
Leu	Ala	Asn 435	Gly	Thr	Phe	Asp	Ala 440	Met	Lys	Ser	Met	Lys 445	Thr	Val	His
Leu	Ala 450	Lys	Asn	Pro	Phe	Ile 455	Cys	Asp	Cys	Asn	Leu 460	Arg	Trp	Leu	Ala
Asp 465	Tyr	Leu	His	Lys	Asn 470	Pro	Ile	Glu	Thr	Ser 475	Gly	Ala	Arg	Cys	Glu 480
Ser	Pro	Lys	Arg	Met 485	His	Arg	Arg	Arg	Ile 490	Glu	Ser	Leu	Arg	Glu 495	Glu
Lys	Phe	Lys	Cys 500	Ser	Trp	Gly	Glu 505	Leu	Arg	Met	Lys	Leu	Ser 510	Gly	Glu
Cys	Arg	Met 515	Asp	Ser	Asp	Cys	Pro 520	Ala	Met	Cys	His	Cys 525	Glu	Gly	Thr
Thr	Val 530	Asp	Cys	Thr	Gly	Arg 535	Arg	Leu	Lys	Glu	Ile 540	Pro	Arg	Asp	Ile
Pro 545	Leu	His	Thr	Thr	Glu 550	Leu	Leu	Leu	Asn	Asp 555	Asn	Glu	Leu	Gly	Arg 560
Ile	Ser	Ser	Asp	Gly 565	Leu	Phe	Gly	Arg	Leu 570	Pro	His	Leu	Val	Lys 575	Leu
Glu	Leu	Lys	Arg 580	Asn	Gln	Leu	Thr	Gly 585	Ile	Glu	Pro	Asn	Ala 590	Phe	Glu
Gly	Ala	Ser 595	His	Ile	Gln	Glu	Leu 600	Gln	Leu	Gly	Glu	Asn 605	Lys	Ile	Lys
Glu	Ile 610	Ser	Asn	Lys	Met	Phe 615	Leu	Gly	Leu	His	Gln 620	Leu	Lys	Thr	Leu
Asn 625	Leu	Tyr	Asp	Asn	Gln 630	Ile	Ser	Cys	Val	Met 635	Pro	Gly	Ser	Phe	Glu 640
His	Leu	Asn	Ser	Leu 645	Thr	Ser	Leu	Asn	Leu 650	Ala	Ser	Asn	Pro	Phe 655	Asn
Cys	Asn	Cys	His 660	Leu	Ala	Trp	Phe	Ala 665	Glu	Cys	Val	Arg	Lys 670	Lys	Ser
Leu	Asn	Gly 675	Gly	Ala	Ala	Arg	Cys 680	Gly	Ala	Pro	Ser	Lys 685	Val	Arg	Asp

Val	Gln	Ile	Lys	Asp	Leu	Pro	His	Ser	Glu	Phe	Lys	Cys	Ser	Ser	Glu	
690						695					700					
Asn	Ser	Glu	Gly	Cys	Leu	Gly	Asp	Gly	Tyr	Cys	Pro	Pro	Ser	Cys	Thr	
705					710					715					720	
Cys	Thr	Gly	Thr	Val	Val	Ala	Cys	Ser	Arg	Asn	Gln	Leu	Lys	Glu	Ile	
				725					730					735		
Pro	Arg	Gly	Ile	Pro	Ala	Glu	Thr	Ser	Glu	Leu	Tyr	Leu	Glu	Ser	Asn	
			740					745					750			
Glu	Ile	Glu	Gln	Ile	His	Tyr	Glu	Arg	Ile	Arg	His	Leu	Arg	Ser	Leu	
		755					760					765				
Thr	Arg	Leu	Asp	Leu	Ser	Asn	Asn	Gln	Ile	Thr	Ile	Leu	Ser	Asn	Tyr	
	770					775					780					
Thr	Phe	Ala	Asn	Leu	Thr	Lys	Leu	Ser	Thr	Leu	Ile	Ile	Ser	Tyr	Asn	
785					790					795					800	
Lys	Leu	Gln	Cys	Leu	Gln	Arg	His	Ala	Leu	Ser	Gly	Leu	Asn	Asn	Leu	
				805					810					815		
Arg	Val	Val	Ser	Leu	His	Gly	Asn	Arg	Ile	Ser	Met	Leu	Pro	Glu	Gly	
			820					825					830			
Ser	Phe	Glu	Asp	Leu	Lys	Ser	Leu	Thr	His	Ile	Ala	Leu	Gly	Ser	Asn	
		835					840					845				
Pro	Leu	Tyr	Cys	Asp	Cys	Gly	Leu	Lys	Trp	Phe	Ser	Asp	Trp	Ile	Lys	
	850					855					860					
Leu	Asp	Tyr	Val	Glu	Pro	Gly	Ile	Ala	Arg	Cys	Ala	Glu	Pro	Glu	Gln	
865					870					875					880	
Met	Lys	Asp	Lys	Leu	Ile	Leu	Ser	Thr	Pro	Ser	Ser	Ser	Phe	Val	Cys	
				885					890					895		
Arg	Gly	Arg	Val	Arg	Asn	Asp	Ile	Leu	Ala	Lys	Cys	Asn	Ala	Cys	Phe	
			900					905					910			
Glu	Gln	Pro	Cys	Gln	Asn	Gln	Ala	Gln	Cys	Val	Ala	Leu	Pro	Gln	Arg	
		915					920					925				
Glu	Tyr	Gln	Cys	Leu	Cys	Gln	Pro	Gly	Tyr	His	Gly	Lys	His	Cys	Glu	
	930					935					940					
Phe	Met	Ile	Asp	Ala	Cys	Tyr	Gly	Asn	Pro	Cys	Arg	Asn	Asn	Ala	Thr	
945					950					955					960	
Cys	Thr	Val	Leu	Glu	Glu	Gly	Arg	Phe	Ser	Cys	Gln	Cys	Ala	Pro	Gly	
				965					970					975		
Tyr	Thr	Gly	Ala	Arg	Cys	Glu	Thr	Asn	Ile	Asp	Asp	Cys	Leu	Gly	Glu	
			980					985					990			
Ile	Lys	Cys	Gln	Asn	Asn	Ala	Thr	Cys	Ile	Asp	Gly	Val	Glu	Ser	Tyr	
	995						1000					1005				
Lys	Cys	Glu	Cys	Gln	Pro	Gly	Phe	Ser	Gly	Glu	Phe	Cys	Asp	Thr	Lys	
	1010					1015					1020					
Ile	Gln	Phe	Cys	Ser	Pro	Glu	Phe	Asn	Pro	Cys	Ala	Asn	Gly	Ala	Lys	
1025					1030					1035					1040	

Gln Gly Glu Gly Ser Thr Glu Pro Pro Thr Val Thr Ala Ala Ser Thr
1395 1400 1405

Cys Arg Lys Glu Gln Val Arg Glu Tyr Tyr Thr Glu Asn Asp Cys Arg
1410 1415 1420

Ser Arg Gln Pro Leu Lys Tyr Ala Lys Cys Val Gly Gly Cys Gly Asn
1425 1430 1435 1440

Gln Cys Cys Ala Ala Lys Ile Val Arg Arg Arg Lys Val Arg Met Val
1445 1450 1455

Cys Ser Asn Asn Arg Lys Tyr Ile Lys Asn Leu Asp Ile Val Arg Lys
1460 1465 1470

Cys Gly Cys Thr Lys Lys Cys Tyr
1475 1480

<210> 8
<211> 155
<212> PRT
<213> Caenorhabditis elegans

<220>
<221> misc_feature
<222> (4)..(152)
<223> note="Xaa signifies gap in sequence"

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Asn Leu Gln Lys Asn Ile Glu Thr Ser Gly Ala Arg Cys Glu Gln Pro
20 25 30

Lys Arg Leu Arg Lys Lys Lys Phe Ala Thr Leu Pro Pro Asn Lys Phe
35 40 45

Lys Cys Lys Gly Ser Glu Ser Phe Val Ser Met Tyr Ala Asp Ser Cys
50 55 60

Phe Ile Asp Ser Ile Cys Pro Thr Gln Cys Asp Cys Tyr Gly Thr Thr
65 70 75 80

Val Asp Cys Asn Lys Arg Gly Leu Asn Thr Ile Pro Thr Ser Ile Pro
85 90 95

Arg Phe Ala Thr Gln Leu Leu Leu Ser Gly Asn Asn Ile Ser Thr Val
100 105 110

Asp Leu Asn Ser Asn Ile His Val Leu Glu Asn Leu Glu Xaa Leu Asp
115 120 125

Leu Ser Asn Asn His Ile Thr Phe Ile Asn Asp Lys Ser Phe Glu Lys
130 135 140

Leu Ser Lys Leu Arg Glu Leu Xaa Leu Asn Asp
145 150 155

<210> 9
<211> 735
<212> PRT
<213> Caenorhabditis elegans

<400> 9
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 1 5 10 15
 Thr Glu Leu Tyr Leu Asp Ala Asn Tyr Ile Asn Glu Ile Pro Ala His
 20 25 30
 Asp Leu Asn Arg Leu Tyr Ser Leu Thr Lys Leu Asp Leu Ser His Asn
 35 40 45
 Arg Leu Ile Ser Leu Glu Asn Asn Thr Phe Ser Asn Leu Thr Arg Leu
 50 55 60
 Ser Thr Leu Ile Ile Ser Tyr Asn Lys Leu Arg Cys Leu Gln Pro Leu
 65 70 75 80
 Ala Phe Asn Gly Leu Asn Ala Leu Arg Ile Leu Ser Leu His Gly Asn
 85 90 95
 Asp Ile Ser Phe Leu Pro Gln Ser Ala Phe Ser Asn Leu Thr Ser Ile
 100 105 110
 Thr His Ile Ala Val Gly Ser Asn Ser Leu Tyr Cys Asp Cys Asn Met
 115 120 125
 Ala Trp Phe Ser Lys Trp Ile Lys Ser Lys Phe Ile Glu Ala Gly Ile
 130 135 140
 Ala Arg Cys Glu Tyr Pro Asn Thr Val Ser Asn Gln Leu Leu Leu Thr
 145 150 155 160
 Ala Gln Pro Tyr Gln Phe Thr Cys Asp Ser Lys Val Pro Thr Lys Leu
 165 170 175
 Ala Thr Lys Cys Asp Leu Cys Leu Asn Ser Pro Cys Lys Asn Asn Ala
 180 185 190
 Ile Cys Glu Thr Thr Ser Ser Arg Lys Tyr Thr Cys Asn Cys Thr Pro
 195 200 205
 Gly Phe Tyr Gly Val His Cys Glu Asn Gln Ile Asp Ala Cys Tyr Gly
 210 215 220
 Ser Pro Cys Leu Asn Asn Ala Thr Cys Lys Val Ala Gln Ala Gly Arg
 225 230 235 240
 Phe Asn Cys Tyr Cys Asn Lys Gly Phe Glu Gly Asp Tyr Cys Glu Lys
 245 250 255
 Asn Ile Asp Asp Cys Val Asn Ser Lys Cys Glu Asn Gly Gly Lys Cys
 260 265 270
 Val Asp Leu Val Arg Phe Cys Ser Glu Glu Leu Lys Asn Phe Gln Ser
 275 280 285
 Phe Gln Ile Asn Ser Tyr Arg Cys Asp Cys Pro Met Glu Tyr Glu Gly
 290 295 300
 Lys His Cys Glu Asp Lys Leu Glu Tyr Cys Thr Lys Lys Leu Asn Pro
 305 310 315 320
 Cys Glu Asn Asn Gly Lys Cys Ile Pro Ile Asn Gly Ser Tyr Ser Cys
 325 330 335
 Met Cys Ser Pro Gly Phe Thr Gly Asn Asn Cys Glu Thr Asn Ile Asp

00922600 00922650

340					345					350					
Asp	Cys	Lys	Asn	Val	Glu	Cys	Gln	Asn	Gly	Gly	Ser	Cys	Val	Asp	Gly
		355					360					365			
Ile	Leu	Ser	Tyr	Asp	Cys	Leu	Cys	Arg	Pro	Gly	Tyr	Ala	Gly	Gln	Tyr
	370				375						380				
Cys	Glu	Ile	Pro	Pro	Met	Met	Asp	Met	Glu	Tyr	Gln	Lys	Thr	Asp	Ala
385					390					395					400
Cys	Gln	Gln	Ser	Ala	Cys	Gly	Gln	Gly	Glu	Cys	Val	Ala	Ser	Gln	Asn
				405					410					415	
Ser	Ser	Asp	Phe	Thr	Cys	Lys	Cys	His	Glu	Gly	Phe	Ser	Gly	Pro	Ser
			420					425					430		
Cys	Asp	Arg	Gln	Met	Ser	Val	Gly	Phe	Lys	Asn	Pro	Gly	Ala	Tyr	Leu
		435					440					445			
Ala	Leu	Asp	Pro	Leu	Ala	Ser	Asp	Gly	Thr	Ile	Thr	Met	Thr	Leu	Arg
	450					455					460				
Thr	Thr	Ser	Lys	Ile	Gly	Ile	Leu	Leu	Tyr	Tyr	Gly	Asp	Asp	His	Phe
465					470					475					480
Val	Ser	Ala	Glu	Leu	Tyr	Asp	Gly	Arg	Val	Lys	Leu	Val	Tyr	Tyr	Ile
				485					490					495	
Gly	Asn	Phe	Pro	Ala	Ser	His	Met	Tyr	Ser	Ser	Val	Lys	Val	Asn	Asp
			500					505					510		
Gly	Leu	Pro	His	Arg	Ile	Ser	Ile	Arg	Thr	Ser	Glu	Arg	Lys	Cys	Phe
		515					520					525			
Leu	Gln	Ile	Asp	Lys	Asn	Pro	Val	Gln	Ile	Val	Glu	Asn	Ser	Gly	Lys
	530					535					540				
Ser	Asp	Gln	Leu	Ile	Thr	Lys	Gly	Lys	Glu	Met	Leu	Tyr	Ile	Gly	Gly
545					550					555					560
Leu	Pro	Ile	Glu	Lys	Ser	Gln	Asp	Ala	Lys	Arg	Arg	Phe	His	Val	Lys
				565					570					575	
Asn	Ser	Glu	Ser	Leu	Lys	Gly	Cys	Ile	Ser	Ser	Ile	Thr	Ile	Asn	Glu
			580					585					590		
Val	Pro	Ile	Asn	Leu	Gln	Gln	Ala	Leu	Glu	Asn	Val	Asn	Thr	Glu	Gln
		595					600					605			
Ser	Cys	Ser	Ala	Thr	Val	Asn	Phe	Cys	Ala	Gly	Ile	Asp	Cys	Gly	Asn
	610					615					620				
Gly	Lys	Cys	Thr	Asn	Asn	Ala	Leu	Ser	Pro	Lys	Gly	Tyr	Met	Cys	Gln
625					630					635					640
Cys	Asp	Ser	His	Phe	Ser	Gly	Glu	His	Cys	Asp	Glu	Lys	Arg	Ile	Lys
				645					650					655	
Cys	Asp	Lys	Gln	Lys	Phe	Arg	Arg	His	His	Ile	Glu	Asn	Glu	Cys	Arg
			660					665					670		
Ser	Val	Asp	Arg	Ile	Lys	Ile	Ala	Glu	Cys	Asn	Gly	Tyr	Cys	Gly	Gly
		675					680					685			
Glu	Gln	Asn	Cys	Cys	Thr	Ala	Val	Lys	Lys	Lys	Gln	Arg	Lys	Val	Lys

690 695 700
 Met Ile Cys Lys Asn Gly Thr Thr Lys Ile Ser Thr Val His Ile Ile
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 Arg Gln Cys Gln Cys Glu Pro Thr Lys Ser Val Leu Ser Glu Lys
 725 730 735

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 <212> PRT
 <213> mouse

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 Gln Asn Gly Ala Gln Cys Val Asp Glu Val Asn Ser Tyr Ala Cys Leu
 35 40 45
 Cys Val Glu Gly Tyr Ser Gly Gln Leu Cys Glu Ile Pro Pro Ala Pro
 50 55 60
 Arg Ser Ser Cys Glu Gly Thr Glu Cys Gln Asn Gly Ala Asn Cys Val
 65 70 75 80
 Asp Gln Gly Ser Arg Pro Val Cys Gln Cys Leu Pro Gly Phe Gly Gly
 85 90 95
 Pro Glu Cys Glu Lys Leu Leu Ser Val Asn Phe Val Asp Arg Asp Thr
 100 105 110
 Tyr Leu Gln Phe Thr Asp Leu Gln Asn Trp Pro Arg Ala Asn Ile Thr
 115 120 125
 Leu Gln Val Ser Thr Ala Glu Asp Asn Gly Ile Leu Leu Tyr Asn Gly
 130 135 140
 Asp Asn Asp His Ile Ala Val Glu Leu Tyr
 145 150

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 Ala Phe Lys Cys His His Gly Gln Cys His Ile Ser Asp Arg Gly Glu
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 Pro Tyr Cys Leu Cys Gln Pro Gly Phe Ser Gly His His Cys Glu Gln
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 Glu Asn Pro Cys Met Gly Glu Ile Val Arg Glu Ala Ile Arg Arg Gln
 35 40 45
 Lys Asp Tyr Ala Ser Cys Ala Thr Ala Ser Lys Val Pro Ile Met Glu
 50 55 60
 Cys Arg Gly Gly Cys Gly Thr Thr Cys Cys Gln Pro Ile Arg Ser Lys
 65 70 75 80

Arg Arg Lys Tyr Val Phe Gln Cys Thr Asp Gly Ser Ser Phe Val Glu
85 90 95

Glu Val Glu Arg His Leu Glu Cys Gly Cys Arg Ala Cys Ser
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<211> 134
<212> PRT
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<400> 12
His Leu Arg Val Leu Gln Leu Met Glu Asn Arg Ile Ser Thr Ile Glu
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Arg Gly Ala Phe Gln Asp Leu Lys Glu Leu Glu Arg Leu Arg Leu Asn
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Arg Asn Asn Leu Gln Leu Phe Pro Glu Leu Leu Phe Leu Gly Thr Ala
35 40 45

Arg Leu Tyr Arg Leu Asp Leu Ser Glu Asn Gln Ile Gln Ala Ile Pro
50 55 60

Arg Lys Ala Phe Arg Gly Ala Val Asp Ile Lys Asn Leu Gln Leu Asp
65 70 75 80

Tyr Asn Gln Ile Ser Cys Ile Glu Asp Gly Ala Phe Arg Ala Leu Arg
85 90 95

Asp Leu Glu Val Leu Thr Leu Asn Asn Asn Ile Thr Arg Leu Ser
100 105 110

Val Ala Ser Phe Asn His Met Pro Lys Leu Arg Thr Phe Arg Leu His
115 120 125

Ser Asn Asn Leu Tyr Cys
130

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<211> 104
<212> PRT
<213> mouse

<400> 13
Asn Asn Asp Asp Cys Val Gly His Lys Cys Arg His Gly Ala Gln Cys
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Val Asp Glu Val Asn Gly Tyr Thr Cys Ile Cys Pro Gln Gly Phe Ser
20 25 30

Gly Leu Phe Cys Glu His Pro Pro Pro Met Val Leu Leu Gln Thr Ser
35 40 45

Pro Cys Asp Gln Tyr Glu Cys Gln Asn Gly Ala Gln Cys Ile Val Val
50 55 60

Gln Gln Glu Pro Thr Cys Arg Cys Pro Pro Gly Phe Ala Gly Pro Arg
65 70 75 80

Cys Glu Lys Leu Ile Thr Val Asn Phe Val Gly Lys Asp Ser Tyr Val
85 90 95

Glu Leu Ala Ser Ala Lys Val Arg
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<400> 14

Ile Leu Asp Val Ala Ser Leu Arg Gln Ala Pro Gly Glu Asn Gly Thr
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Ser Phe His Gly Cys Ile Arg Asn Leu Tyr Ile Asn Ser Glu Leu Gln
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Asp Phe Arg Lys Met Pro Met Gln Thr Gly Ile Leu Pro Gly Cys Glu
35 40 45

Pro Cys His Lys Lys Val Cys Ala His Gly Cys Cys Gln Pro Ser Ser
50 55 60

Gln Ser Gly Phe Thr Cys Glu Cys Glu Glu Gly Trp Met Gly Pro Leu
65 70 75 80

Cys Asp Gln Arg Thr Asn Asp Pro Cys Leu Gly Asn Lys Cys Val His
85 90 95

Gly Thr Cys Leu Pro Ile Asn Ala Phe Ser Tyr Ser Cys Lys Cys Leu
100 105 110

Glu Gly His Gly Gly Val Leu Cys Asp Glu Glu Glu Asp Leu Phe Asn
115 120 125

Pro Cys Gln Met Ile Lys Cys Lys His Gly Lys Cys Arg Leu Ser Gly
130 135 140

Val Gly Gln Pro Tyr Cys Glu Cys Asn Ser Gly Phe Thr Gly Asp Ser
145 150 155 160

Cys Asp Arg Glu Ile Ser Cys Arg Gly Glu Arg Ile Arg Asp Tyr Tyr
165 170 175

Gln Lys Gln Gln Gly Tyr Ala Ala Cys Gln Thr Thr Lys Lys Val Ser
180 185 190

Arg Leu Glu Cys Arg Gly Gly Cys Ala Gly Gly Gln Cys Cys Gly Pro
195 200 205

Leu Arg Ser Lys Arg Arg Lys Tyr Ser Phe Glu Cys Thr Asp Gly Ser
210 215 220

Ser Phe Val Asp Glu Val Glu Lys Val Val Lys Cys Gly Cys Ala Arg
225 230 235 240

Cys Ala Ser

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<211> 1395
<212> PRT
<213> Drosophila melanogaster

<400> 15

Met His Pro Met His Pro Glu Asn His Ala Ile Ala Arg Ser Thr Ser

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				20							25					30			
	Pro	Ala	Trp	Leu	Leu	Leu	Val	Leu	Val	Ala	Ser	Asn	Gly	Leu	Pro	Ala			
			35						40					45					
	Val	Arg	Gly	Gln	Tyr	Gln	Ser	Pro	Arg	Ile	Ile	Glu	His	Pro	Thr	Asp			
			50				55					60							
	Leu	Val	Val	Lys	Lys	Asn	Glu	Pro	Ala	Thr	Leu	Asn	Cys	Lys	Val	Glu			
65					70						75					80			
	Gly	Lys	Pro	Glu	Pro	Thr	Ile	Glu	Trp	Phe	Lys	Asp	Gly	Glu	Pro	Val			
				85						90					95				
	Ser	Thr	Asn	Glu	Lys	Lys	Ser	His	Arg	Val	Gln	Phe	Lys	Asp	Gly	Ala			
			100						105					110					
	Leu	Phe	Phe	Tyr	Arg	Thr	Met	Gln	Gly	Lys	Lys	Glu	Gln	Asp	Gly	Gly			
			115					120					125						
	Glu	Tyr	Trp	Cys	Val	Ala	Lys	Asn	Arg	Val	Gly	Gln	Ala	Val	Ser	Arg			
			130				135					140							
	His	Ala	Ser	Leu	Gln	Ile	Ala	Val	Leu	Arg	Asp	Asp	Phe	Arg	Val	Glu			
145					150						155					160			
	Pro	Lys	Asp	Thr	Arg	Val	Ala	Lys	Gly	Glu	Thr	Ala	Leu	Leu	Glu	Cys			
				165						170					175				
	Gly	Pro	Pro	Lys	Gly	Ile	Pro	Glu	Pro	Thr	Leu	Ile	Trp	Ile	Lys	Asp			
			180						185					190					
	Gly	Val	Pro	Leu	Asp	Asp	Leu	Lys	Ala	Met	Ser	Phe	Gly	Ala	Ser	Ser			
			195					200					205						
	Arg	Val	Arg	Ile	Val	Asp	Gly	Gly	Asn	Leu	Leu	Ile	Ser	Asn	Val	Glu			
			210				215					220							
	Pro	Ile	Asp	Glu	Gly	Asn	Tyr	Lys	Cys	Ile	Ala	Gln	Asn	Leu	Val	Gly			
225					230						235					240			
	Thr	Arg	Glu	Ser	Ser	Tyr	Ala	Lys	Leu	Ile	Val	Gln	Val	Lys	Pro	Tyr			
				245					250					255					
	Phe	Met	Lys	Glu	Pro	Lys	Asp	Gln	Val	Met	Leu	Tyr	Gly	Gln	Thr	Ala			
			260					265						270					
	Thr	Phe	His	Cys	Ser	Val	Gly	Gly	Asp	Pro	Pro	Pro	Lys	Val	Leu	Trp			
			275					280					285						
	Lys	Lys	Glu	Glu	Gly	Asn	Ile	Pro	Val	Ser	Arg	Ala	Arg	Ile	Leu	His			
			290			295						300							
	Asp	Glu	Lys	Ser	Leu	Glu	Ile	Ser	Asn	Ile	Thr	Pro	Thr	Asp	Glu	Gly			
305					310						315				320				
	Thr	Tyr	Val	Cys	Glu	Ala	His	Asn	Asn	Val	Gly	Gln	Ile	Ser	Ala	Arg			
				325						330				335					
	Ala	Ser	Leu	Ile	Val	His	Ala	Pro	Pro	Asn	Phe	Thr	Lys	Arg	Pro	Ser			
			340					345						350					
	Asn	Lys	Lys	Val	Gly	Leu	Asn	Gly	Val	Val	Gln	Leu	Pro	Cys	Met	Ala			
			355					360					365						
	Ser	Gly	Asn	Pro	Pro	Pro	Ser	Val	Phe	Trp	Thr	Lys	Glu	Gly	Val	Ser			
			370				375					380							
	Thr	Leu	Met	Phe	Pro	Asn	Ser	Ser	His	Gly	Arg	Gln	Tyr	Val	Ala	Ala			
385					390						395					400			
	Asp	Gly	Thr	Leu	Gln	Ile	Thr	Asp	Val	Arg	Gln	Glu	Asp	Glu	Gly	Tyr			
				405						410				415					
	Tyr	Val	Cys	Ser	Ala	Phe	Ser	Val	Val	Asp	Ser	Ser	Thr	Val	Arg	Val			
			420					425						430					
	Phe	Leu	Gln	Val	Ser	Ser	Val	Asp	Glu	Arg	Pro	Pro	Pro	Ile	Ile	Gln			
			435					440					445						
	Ile	Gly	Pro	Ala	Asn	Gln	Thr	Leu	Pro	Lys	Gly	Ser	Val	Ala	Thr	Leu			
			450				455					460							
	Pro	Cys	Arg	Ala	Thr	Gly	Asn	Pro	Ser	Pro	Arg	Ile	Lys	Trp	Phe	His			
465					470						475				480				
	Asp	Gly	His	Ala	Val	Gln	Ala	Gly	Asn	Arg	Tyr	Ser	Ile	Ile	Gln	Gly			
				485						490				495					
	Ser	Ser	Leu	Arg	Val	Asp	Asp	Leu	Gln	Leu	Ser	Asp	Ser	Gly	Thr	Tyr			
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	Thr	Cys	Thr	Ala	Ser	Gly	Glu	Arg	Gly	Glu	Thr	Ser	Trp	Ala	Ala	Thr			
			515				520						525						
	Leu	Thr	Val	Glu	Lys	Pro	Gly	Ser	Thr	Ser	Leu	His	Arg	Ala	Ala	Asp			
530							535					540							

Pro	Ser	Thr	Tyr	Pro	Ala	Pro	Pro	Gly	Thr	Pro	Lys	Val	Leu	Asn	Val
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Ser	Arg	Thr	Ser	Ile	Ser	Leu	Arg	Trp	Ala	Lys	Ser	Gln	Glu	Lys	Pro
				565					570					575	
Gly	Ala	Val	Gly	Pro	Ile	Ile	Gly	Tyr	Thr	Val	Glu	Tyr	Phe	Ser	Pro
			580					585					590		
Asp	Leu	Gln	Thr	Gly	Trp	Ile	Val	Ala	Ala	His	Arg	Val	Gly	Asp	Thr
		595					600					605			
Gln	Val	Thr	Ile	Ser	Gly	Leu	Thr	Pro	Gly	Thr	Ser	Tyr	Val	Phe	Leu
	610					615					620				
Val	Arg	Ala	Glu	Asn	Thr	Gln	Gly	Ile	Ser	Val	Pro	Ser	Gly	Leu	Ser
625					630					635					640
Asn	Val	Ile	Lys	Thr	Ile	Glu	Ala	Asp	Phe	Asp	Ala	Ala	Ser	Ala	Asn
				645					650					655	
Asp	Leu	Ser	Ala	Ala	Arg	Thr	Leu	Leu	Thr	Gly	Lys	Ser	Val	Glu	Leu
			660					665					670		
Ile	Asp	Ala	Ser	Ala	Ile	Asn	Ala	Ser	Ala	Val	Arg	Leu	Glu	Trp	Met
	675					680						685			
Leu	His	Val	Ser	Ala	Asp	Glu	Lys	Tyr	Val	Glu	Gly	Leu	Arg	Ile	His
	690					695					700				
Tyr	Lys	Asp	Ala	Ser	Val	Pro	Ser	Ala	Gln	Tyr	His	Ser	Ile	Thr	Val
705					710					715					720
Met	Asp	Ala	Ser	Ala	Glu	Ser	Phe	Val	Val	Gly	Asn	Leu	Lys	Lys	Tyr
				725					730					735	
Thr	Lys	Tyr	Glu	Phe	Phe	Leu	Thr	Pro	Phe	Phe	Glu	Thr	Ile	Glu	Gly
			740					745					750		
Gln	Pro	Ser	Asn	Ser	Lys	Thr	Ala	Leu	Thr	Tyr	Glu	Asp	Val	Pro	Ser
		755					760					765			
Ala	Pro	Pro	Asp	Asn	Ile	Gln	Ile	Gly	Met	Tyr	Asn	Gln	Thr	Ala	Gly
	770					775					780				
Trp	Val	Arg	Trp	Thr	Pro	Pro	Pro	Ser	Gln	His	His	Asn	Gly	Asn	Leu
785					790					795					800
Tyr	Gly	Tyr	Lys	Ile	Glu	Val	Ser	Ala	Gly	Asn	Thr	Met	Lys	Val	Leu
				805					810					815	
Ala	Asn	Met	Thr	Leu	Asn	Ala	Thr	Thr	Thr	Ser	Val	Leu	Leu	Asn	Asn
			820					825					830		
Leu	Thr	Thr	Gly	Ala	Val	Tyr	Ser	Val	Arg	Leu	Asn	Ser	Phe	Thr	Lys
		835					840					845			
Ala	Gly	Asp	Gly	Pro	Tyr	Ser	Lys	Pro	Ile	Ser	Leu	Phe	Met	Asp	Pro
	850					855					860				
Thr	His	His	Val	His	Pro	Pro	Arg	Ala	His	Pro	Ser	Gly	Thr	His	Asp
	865				870					875					880
Gly	Arg	His	Glu	Gly	Gln	Asp	Leu	Thr	Tyr	His	Asn	Asn	Gly	Asn	Ile
			885						890					895	
Pro	Pro	Gly	Asp	Ile	Asn	Pro	Thr	Thr	His	Lys	Lys	Thr	Thr	Asp	Tyr
			900					905					910		
Leu	Ser	Gly	Pro	Trp	Leu	Met	Val	Leu	Val	Cys	Ile	Val	Leu	Leu	Val
		915					920					925			
Leu	Val	Ile	Ser	Ala	Ala	Ile	Ser	Met	Val	Tyr	Phe	Lys	Arg	Lys	His
	930					935					940				
Gln	Met	Thr	Lys	Glu	Leu	Gly	His	Leu	Ser	Val	Val	Ser	Asp	Asn	Glu
945					950					955					960
Ile	Thr	Ala	Leu	Asn	Ile	Asn	Ser	Lys	Glu	Ser	Leu	Trp	Ile	Asp	His
			965						970					975	
His	Arg	Gly	Trp	Arg	Thr	Ala	Asp	Thr	Asp	Lys	Asp	Ser	Gly	Leu	Ser
			980					985					990		
Glu	Ser	Lys	Leu	Leu	Ser	His	Val	Asn	Ser	Ser	Gln	Ser	Asn	Tyr	Asn
		995					1000					1005			
Asn	Ser	Asp	Gly	Gly	Thr	Asp	Tyr	Ala	Glu	Val	Asp	Thr	Arg	Asn	Leu
	1010					1015					1020				
Thr	Thr	Phe	Tyr	Asn	Cys	Arg	Lys	Ser	Pro	Asp	Asn	Pro	Thr	Pro	Tyr
1025					1030					1035					1040
Ala	Thr	Thr	Met	Ile	Ile	Gly	Thr	Ser	Ser	Ser	Glu	Thr	Cys	Thr	Lys
			1045						1050					1055	
Thr	Thr	Ser	Ile	Ser	Ala	Asp	Lys	Asp	Ser	Gly	Thr	His	Ser	Pro	Tyr
			1060					1065					1070		
Ser	Asp	Ala	Phe	Ala	Gly	Gln	Val	Pro	Ala	Val	Pro	Val	Val	Lys	Ser

1075	1080	1085
Asn Tyr Leu Gln Tyr Pro Val Glu Pro Ile Asn Trp Ser Glu Phe Leu		
1090	1095	1100
Pro Pro Pro Pro Glu His Pro Pro Pro Ser Ser Thr Tyr Gly Tyr Ala		
1105	1110	1115
Gln Gly Ser Pro Glu Ser Ser Arg Lys Ser Ser Lys Ser Ala Gly Ser		
1125	1130	1135
Gly Ile Ser Thr Asn Gln Ser Ile Leu Asn Ala Ser Ile His Ser Ser		
1140	1145	1150
Ser Ser Gly Gly Phe Ser Ala Trp Gly Val Ser Pro Gln Tyr Ala Val		
1155	1160	1165
Ala Cys Pro Pro Glu Asn Val Tyr Ser Asn Pro Leu Ser Ala Val Ala		
1170	1175	1180
Gly Gly Thr Gln Asn Arg Tyr Gln Ile Thr Pro Thr Asn Gln His Pro		
1185	1190	1195
Pro Gln Leu Pro Ala Tyr Phe Ala Thr Thr Gly Pro Gly Gly Ala Val		
1205	1210	1215
Pro Pro Asn His Leu Pro Phe Ala Thr Gln Arg His Ala Ala Ser Glu		
1220	1225	1230
Tyr Gln Ala Gly Leu Asn Ala Ala Arg Cys Ala Gln Ser Arg Ala Cys		
1235	1240	1245
Asn Ser Cys Asp Ala Leu Ala Thr Pro Ser Pro Met Gln Pro Pro Pro		
1250	1255	1260
Pro Val Pro Val Pro Glu Gly Trp Tyr Gln Pro Val His Pro Asn Ser		
1265	1270	1275
His Pro Met His Pro Thr Ser Ser Asn His Gln Ile Tyr Gln Cys Ser		
1285	1290	1295
Ser Glu Cys Ser Asp His Ser Arg Ser Ser Gln Ser His Lys Arg Gln		
1300	1305	1310
Leu Gln Leu Glu Glu His Gly Ser Ser Ala Lys Gln Arg Gly Gly His		
1315	1320	1325
His Arg Arg Arg Ala Pro Val Val Gln Pro Cys Met Glu Ser Glu Asn		
1330	1335	1340
Glu Asn Met Leu Ala Glu Tyr Glu Gln Arg Gln Tyr Thr Ser Asp Cys		
1345	1350	1355
Cys Asn Ser Ser Arg Glu Gly Asp Thr Cys Ser Cys Ser Glu Gly Ser		
1365	1370	1375
Cys Leu Tyr Ala Glu Ala Gly Glu Pro Ala Pro Arg Gln Met Thr Ala		
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Lys Asn Thr		
1395		

<210> 16
 <211> 1381
 <212> PRT
 <213> Drosophila melanogaster

<400> 16

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Lys	Asn	Asp	Pro	Phe	Thr	Phe	Asn	Cys	Gln	Ala	Glu	Gly	Asn	Pro	Thr
			20					25					30		
Pro	Thr	Ile	Gln	Trp	Phe	Lys	Asp	Gly	Arg	Glu	Leu	Lys	Thr	Asp	Thr
		35					40					45			
Gly	Ser	His	Arg	Ile	Met	Leu	Pro	Ala	Gly	Gly	Leu	Phe	Phe	Leu	Lys
	50					55					60				
Val	Ile	His	Ser	Arg	Arg	Glu	Ser	Asp	Ala	Gly	Thr	Tyr	Trp	Cys	Glu
65					70					75					80
Ala	Lys	Asn	Glu	Phe	Gly	Val	Ala	Arg	Ser	Arg	Asn	Ala	Thr	Leu	Gln
				85					90					95	
Val	Ala	Val	Leu	Arg	Asp	Glu	Phe	Arg	Leu	Glu	Pro	Ala	Asn	Thr	Arg
			100					105					110		
Val	Ala	Gln	Gly	Glu	Val	Ala	Leu	Met	Glu	Cys	Gly	Ala	Pro	Arg	Gly
		115					120					125			
Ser	Pro	Glu	Pro	Gln	Ile	Ser	Trp	Arg	Lys	Asn	Gly	Gln	Thr	Leu	Asn
	130					135					140				
Leu	Val	Gly	Asn	Lys	Arg	Ile	Arg	Ile	Val	Asp	Gly	Gly	Asn	Leu	Ala

145					150					155					160
Ile	Gln	Glu	Ala	Arg	Gln	Ser	Asp	Asp	Gly	Arg	Tyr	Gln	Cys	Val	Val
				165					170					175	
Lys	Asn	Val	Val	Gly	Thr	Arg	Glu	Ser	Ala	Thr	Ala	Phe	Leu	Lys	Val
				180					185					190	
His	Val	Arg	Pro	Phe	Leu	Ile	Arg	Gly	Pro	Gln	Asn	Gln	Thr	Ala	Val
				195					200					205	
Val	Gly	Ser	Ser	Val	Val	Phe	Gln	Cys	Arg	Ile	Gly	Gly	Asp	Pro	Leu
				210					215					220	
Pro	Asp	Val	Leu	Trp	Arg	Arg	Thr	Ala	Ser	Gly	Gly	Asn	Met	Pro	Leu
225					230					235					240
Arg	Lys	Phe	Ser	Trp	Leu	His	Ser	Ala	Ser	Gly	Arg	Val	His	Val	Leu
				245					250					255	
Glu	Asp	Arg	Ser	Leu	Lys	Leu	Asp	Asp	Val	Thr	Leu	Glu	Asp	Met	Gly
				260					265					270	
Glu	Tyr	Thr	Cys	Glu	Ala	Asp	Asn	Ala	Val	Gly	Gly	Ile	Thr	Ala	Thr
				275					280					285	
Gly	Ile	Leu	Thr	Val	His	Ala	Pro	Pro	Lys	Phe	Val	Ile	Arg	Pro	Lys
				290					295					300	
Asn	Gln	Leu	Val	Glu	Ile	Gly	Asp	Glu	Val	Leu	Phe	Glu	Cys	Gln	Ala
305					310					315					320
Asn	Gly	His	Pro	Arg	Pro	Thr	Leu	Tyr	Trp	Ser	Val	Glu	Gly	Asn	Ser
				325					330					335	
Ser	Leu	Leu	Leu	Pro	Gly	Tyr	Arg	Asp	Gly	Arg	Met	Glu	Val	Thr	Leu
				340					345					350	
Thr	Pro	Glu	Gly	Arg	Ser	Val	Leu	Ser	Ile	Ala	Arg	Phe	Ala	Arg	Glu
				355					360					365	
Asp	Ser	Gly	Lys	Val	Val	Thr	Cys	Asn	Ala	Leu	Asn	Ala	Val	Gly	Ser
				370					375					380	
Val	Ser	Ser	Arg	Thr	Val	Val	Ser	Val	Asp	Thr	Gln	Phe	Glu	Leu	Pro
385					390					395					400
Pro	Pro	Ile	Ile	Glu	Gln	Gly	Pro	Val	Asn	Gln	Thr	Leu	Pro	Val	Lys
				405					410					415	
Ser	Ile	Val	Val	Leu	Pro	Cys	Arg	Thr	Leu	Gly	Thr	Pro	Val	Pro	Gln
				420					425					430	
Val	Ser	Trp	Tyr	Leu	Asp	Gly	Ile	Pro	Ile	Asp	Val	Gln	Glu	His	Glu
				435					440					445	
Arg	Arg	Asn	Leu	Ser	Asp	Ala	Gly	Ala	Leu	Thr	Ile	Ser	Asp	Leu	Gln
				450					455					460	
Arg	His	Glu	Asp	Glu	Gly	Leu	Tyr	Thr	Cys	Val	Ala	Ser	Asn	Arg	Asn
465					470					475					480
Gly	Lys	Ser	Ser	Trp	Ser	Gly	Tyr	Leu	Arg	Leu	Asp	Thr	Pro	Thr	Asn
				485					490					495	
Pro	Asn	Ile	Lys	Phe	Phe	Arg	Ala	Pro	Glu	Leu	Ser	Thr	Tyr	Pro	Gly
				500					505						

Ser	Ala	Ser	Ala	Ser	Ala	Ser	Ala	Ser	Ala	Leu	Ile	Ser	Thr	Lys	Pro
690						695				700					
Asn	Ile	Ala	Ala	Ala	Gly	Lys	Arg	Asp	Gly	Glu	Thr	Asn	Gln	Ser	Gly
705					710					715					720
Gly	Gly	Ala	Pro	Thr	Pro	Leu	Asn	Thr	Lys	Tyr	Arg	Met	Leu	Thr	Ile
				725					730					735	
Leu	Asn	Gly	Gly	Gly	Ala	Ser	Ser	Cys	Thr	Ile	Thr	Gly	Leu	Val	Gln
			740					745					750		
Tyr	Thr	Leu	Tyr	Glu	Phe	Phe	Ile	Val	Pro	Phe	Tyr	Lys	Ser	Val	Glu
		755					760					765			
Gly	Lys	Pro	Ser	Asn	Ser	Arg	Ile	Ala	Arg	Thr	Leu	Glu	Asp	Val	Pro
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Ser	Glu	Ala	Pro	Tyr	Gly	Met	Glu	Ala	Leu	Leu	Leu	Asn	Ser	Ser	Ala
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Val	Phe	Leu	Lys	Trp	Lys	Ala	Pro	Glu	Leu	Lys	Asp	Arg	His	Gly	Val
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			820					825					830		
Phe	Ser	Arg	Ile	Leu	Thr	Asn	Val	Thr	Ile	Asp	Ala	Ala	Ser	Pro	Thr
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Leu	Val	Leu	Ala	Asn	Leu	Thr	Glu	Gly	Val	Met	Tyr	Thr	Val	Gly	Val
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Ala	Ala	Gly	Asn	Asn	Ala	Gly	Val	Gly	Pro	Tyr	Cys	Val	Pro	Ala	Thr
865					870				875						880
Leu	Arg	Leu	Asp	Pro	Ile	Thr	Lys	Arg	Leu	Asp	Pro	Phe	Ile	Asn	Gln
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Arg	Asp	His	Val	Asn	Asp	Val	Leu	Thr	Gln	Pro	Trp	Phe	Ile	Ile	Leu
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Leu	Gly	Ala	Ile	Leu	Ala	Val	Leu	Met	Leu	Ser	Phe	Gly	Ala	Met	Val
		915					920					925			
Phe	Val	Lys	Arg	Lys	His	Met	Met	Met	Lys	Gln	Ser	Ala	Leu	Asn	Thr
	930					935					940				
Met	Arg	Gly	Asn	His	Thr	Ser	Asp	Val	Leu	Lys	Met	Pro	Ser	Leu	Ser
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Ala	Arg	Asn	Gly	Asn	Gly	Tyr	Trp	Leu	Asp	Ser	Ser	Thr	Gly	Gly	Met
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Val	Trp	Arg	Pro	Ser	Pro	Gly	Gly	Asp	Ser	Leu	Glu	Met	Gln	Lys	Asp
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His	Ile	Ala	Asp	Tyr	Ala	Pro	Val	Cys	Gly	Ala	Pro	Gly	Ser	Pro	Ala
		995				1000						1005			
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Gln	Arg	Tyr	Val	Gly	Glu	Tyr	Ser	Asn	Ile	Pro	Thr	Asp	Tyr	Ala	Glu
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Val	Ser	Ser	Phe	Gly	Lys	Ala	Pro	Ser	Glu	Tyr	Gly	Arg	His	Gly	Asn
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Ala	Ser	Pro	Ala	Pro	Tyr	Ala	Thr	Ser	Ser	Ile	Leu	Ser	Pro	His	Gln
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Gln	Gln	Gln	Gln	Gln	Gln	Pro	Arg	Tyr	Gln	Gln	Arg	Pro	Val	Pro	Gly
	1090					1095					1100				
Tyr	Gly	Leu	Gln	Arg	Pro	Met	His	Pro	His	Tyr	Gln	Gln	Gln	Gln	His
1105					1110					1115					1120
Gln	Gln	Gln	Gln	Ala	Gln	Gln	Thr	His	Gln	Gln	His	Gln	Ala	Leu	Gln
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Gln	His	Gln	Gln	Leu	Pro	Pro	Ser	Asn	Ile	Tyr	Gln	Gln	Met	Ser	Thr
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Ser	Glu	Gln	Tyr	Tyr	Tyr	Pro	Lys	Asp	Lys	Gln	Arg	His	Ile	His	Ile
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Thr	Glu	Asn	Lys	Leu	Ser	Asn	Cys	His	Thr	Tyr	Glu	Ala	Ala	Pro	Gly
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Ala	Lys	Gln	Ser	Ser	Pro	Ile	Ser	Ser	Gln	Phe	Ala	Ser	Val	Arg	Arg
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Gln	Gln	Leu	Pro	Pro	Asn	Cys	Ser	Ile	Gly	Arg	Glu	Ser	Ala	Arg	Phe

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Lys	Pro	Ala	Asp	Gln	Ser	Val	Pro	Ala	Gly	Gly	Thr	Ala	Thr	Phe	Glu	325	Gln	Pro	Ser	Pro	Ala	Tyr	Phe	Trp	Ser	Lys	Glu	330	Thr	Ala	Thr	Phe	Trp	Ser	Lys	Glu	335								
Cys	Thr	Leu	Val	Gly	Gln	Pro	Ser	Pro	Ala	Tyr	Phe	Trp	Ser	Lys	Glu	340	Gln	Pro	Ser	Pro	Ala	Tyr	Phe	Trp	Ser	Lys	Glu	345	Thr	Ala	Thr	Phe	Trp	Ser	Lys	Glu	350								
Gly	Gln	Gln	Asp	Leu	Leu	Phe	Pro	Ser	Tyr	Val	Ser	Ala	Asp	Gly	Arg	355	Leu	Leu	Phe	Pro	Ser	Tyr	Val	Ser	Ala	Asp	Gly	Arg	360	Thr	Ala	Thr	Phe	Trp	Ser	Lys	Glu	365							
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Gln	Ser	Ile	Ile	Lys	Tyr	Leu	Ile	Ser	Ala	Val	Thr	Gly	Asn	Thr	Pro	435	Pro	Pro	Thr	Ile	Glu	His	Gly	His	Gln	Asn	Gln	Thr	Leu	445	Thr	Ala	Thr	Phe	Trp	Ser	Lys	Glu	450						
Ala	Lys	Pro	Pro	Pro	Thr	Ile	Glu	His	Gly	His	Gln	Asn	Gln	Thr	Leu	450	Pro	Pro	Thr	Ile	Glu	His	Gly	His	Gln	Asn	Gln	Thr	Leu	455	Thr	Ala	Thr	Phe	Trp	Ser	Lys	Glu	460						
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Ser	Asn	Ala	Gln	Phe	Val	Arg	Met	Pro	Asp	Pro	Ser	Asn	Phe	Pro	Ser	545	Pro	Pro	Thr	Ile	Glu	His	Gly	His	Gln	Asn	Gln	Thr	Leu	550	Thr	Ala	Thr	Phe	Trp	Ser	Lys	Glu	555						
Ser	Pro	Thr	Gln	Pro	Ile	Ile	Val	Asn	Val	Thr	Asp	Thr	Glu	Val	Glu	565	Pro	Pro	Thr	Ile	Glu	His	Gly	His	Gln	Asn	Gln	Thr	Leu	570	Thr	Ala	Thr	Phe</											

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Lys	His	Leu	Ala	Ala	Gln	Gln	Glu	Asn	Glu	Ser	Phe	Leu	Tyr	Gly	Leu
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Ile	Asn	Lys	Ser	His	Val	Pro	Val	Ile	Val	Ile	Val	Ala	Ile	Leu	Ile
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Ser	Thr	Phe	Tyr	Gly	Asn	Gln	Tyr	His	Asp	Pro	Ser	Pro	Tyr	Ala	
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Thr	Thr	Thr	Leu	Val	Leu	Ser	Asn	Gln	Gln	Pro	Ala	Trp	Leu	Asn	Asp
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Lys	Met	Leu	Arg	Ala	Pro	Ala	Met	Pro	Thr	Asn	Pro	Val	Pro	Pro	Glu
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Ser	Tyr	Val	Gln	Leu	His	Ser	Ser	Asp	Gly	Thr	Gly	Ser	Ser	Lys	Glu
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Ile	Pro	Pro	Pro	Pro	Ser	Asn	Pro	Pro	Pro	Pro	Gly	Gly	His	Val	Tyr
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Asp	Thr	Ala	Thr	Arg	Arg	Gln	Leu	Asn	Arg	Gly	Ser	Thr	Pro	Arg	Glu
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31

[illegible]

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Ser	Tyr	Ile 595	Ile	Glu	Ala	Phe	Ser 600	His	Ala	Ser	Gly	Ser 605	Trp	Gln	
Thr	Val	Ala	Glu	Asn	Val	Lys 615	Thr	Glu	Thr	Ser	Ala 620	Ile	Lys	Gly	Leu
Lys 625	Pro	Asn	Ala	Ile	Tyr 630	Leu	Phe	Leu	Val	Arg 635	Ala	Ala	Asn	Ala	Tyr 640
Gly	Ile	Ser	Asp	Pro 645	Ser	Gln	Ile	Ser	Asp 650	Pro	Val	Lys	Thr	Gln	Asp 655
Val	Leu	Pro	Thr 660	Ser	Gln	Gly	Val	Asp 665	His	Lys	Gln	Val	Gln	Arg	Glu 670
Leu	Gly	Asn 675	Ala	Val	Leu	His	Leu 680	His	Asn	Pro	Thr 685	Val	Leu	Ser	Ser
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Gln 705	Gly	Tyr	Lys	Ile	Leu 710	Tyr	Arg	Pro	Ser	Gly 715	Ala	Asn	His	Gly	Glu 720
Ser	Asp	Trp	Leu	Val 725	Phe	Glu	Val	Arg	Thr 730	Pro	Ala	Lys	Asn	Ser	Val 735
Val	Ile	Pro	Asp 740	Leu	Arg	Lys	Gly	Val 745	Asn	Tyr	Glu	Ile	Lys	Ala	Arg
Pro	Phe	Phe 755	Asn	Glu	Phe	Gln	Gly 760	Ala	Asp	Ser	Glu	Ile 765	Lys	Phe	Ala
Lys	Thr 770	Leu	Glu	Glu	Ala	Pro 775	Ser	Ala	Pro	Pro	Gln 780	Gly	Val	Thr	Val
Ser 785	Lys	Asn	Asp	Gly	Asn 790	Gly	Thr	Ala	Ile	Leu 795	Val	Ser	Trp	Gln	Pro 800
Pro	Pro	Glu	Asp	Thr 805	Gln	Asn	Gly	Met	Val 810	Gln	Glu	Tyr	Lys	Val	Trp 815
Cys	Leu	Gly	Asn 820	Glu	Thr	Arg	Tyr	His 825	Ile	Asn	Lys	Thr	Val	Asp	Gly 830
Ser	Thr	Phe 835	Ser	Val	Val	Ile	Pro 840	Phe	Leu	Val	Pro	Gly 845	Ile	Arg	Tyr
Ser	Val 850	Glu	Val	Ala	Ala	Ser 855	Thr	Gly	Ala	Gly	Ser 860	Gly	Val	Lys	Ser
Glu 865	Pro	Gln	Phe	Ile	Gln 870	Leu	Asp	Ala	His	Gly 875	Asn	Pro	Val	Ser	Pro 880
Glu	Asp	Gln	Val	Ser 885	Leu	Ala	Gln	Gln	Ile 890	Ser	Asp	Val	Val	Lys	Gln 895
Pro	Ala	Phe	Ile 900	Ala	Gly	Ile	Gly	Ala 905	Ala	Cys	Trp	Ile	Ile 910	Leu	Met
Val	Phe 915	Ser	Ile	Trp	Leu	Tyr	Arg 920	His	Arg	Lys	Lys	Arg 925	Asn	Gly	Leu
Thr	Ser 930	Thr	Tyr	Ala	Gly	Ile 935	Arg	Lys	Val	Pro	Ser 940	Phe	Thr	Phe	Thr
Pro 945	Thr	Val	Thr	Tyr	Gln 950	Arg	Gly	Gly	Glu	Ala 955	Val	Ser	Ser	Gly	Gly 960
Arg	Pro	Gly	Leu	Leu 965	Asn	Ile	Ser	Glu	Pro 970	Ala	Ala	Gln	Pro	Trp	Leu 975
Ala	Asp	Thr	Trp 980	Pro	Asn	Thr	Gly	Asn 985	Asn	His	Asn	Asp	Cys	Ser	Ile
Ser	Cys 995	Cys	Thr	Ala	Gly	Asn	Gly 1000	Asn	Ser	Asp	Ser	Asn 1005	Leu	Thr	Thr
Tyr	Ser 1010	Arg	Pro	Ala	Asp	Cys 1015	Ile	Ala	Asn	Tyr	Asn 1020	Asn	Gln	Leu	Asp
Asn 1025	Lys	Gln	Thr	Asn 1030	Leu	Met	Leu	Pro	Glu	Ser 1035	Thr	Val	Tyr	Gly	Asp 1040
Val	Asp	Leu	Ser	Asn 1045	Lys	Ile	Asn	Glu	Met 1050	Lys	Thr	Phe	Asn	Ser	Pro 1055
Asn	Leu	Lys	Asp 1060	Gly	Arg	Phe	Val	Asn 1065	Pro	Ser	Gly	Gln	Pro	Thr	Pro 1070
Tyr	Ala	Thr 1075	Thr	Gln	Leu	Ile	Gln 1080	Ser	Asn	Leu	Ser	Asn 1085	Asn	Met	Asn
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Gln Lys Gln Glu Val Ala Pro Val Gln Tyr Asn Ile Val Glu Gln Asn		
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Lys Leu Asn Lys Asp Tyr Arg Ala Asn Asp Thr Val Pro Pro Thr Ile		1120
	1125	1130
Pro Tyr Asn Gln Ser Tyr Asp Gln Asn Thr Gly Gly Ser Tyr Asn Ser		1135
	1140	1145
Ser Asp Arg Gly Ser Ser Thr Ser Gly Ser Gln Gly His Lys Lys Gly		1150
	1155	1160
Ala Arg Thr Pro Lys Val Pro Lys Gln Gly Gly Met Asn Trp Ala Asp		1165
	1170	1175
Leu Leu Pro Pro Pro Pro Ala His Pro Pro Pro His Ser Asn Ser Glu		1180
1185	1190	1195
Glu Tyr Asn Ile Ser Val Asp Glu Ser Tyr Asp Gln Glu Met Pro Cys		1200
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Pro Val Pro Pro Ala Arg Met Tyr Leu Gln Gln Asp Glu Leu Glu Glu		1215
	1220	1225
Glu Glu Asp Glu Arg Gly Pro Thr Pro Pro Val Arg Gly Ala Ala Ser		1230
	1235	1240
Ser Pro Ala Ala Val Ser Tyr Ser His Gln Ser Thr Ala Thr Leu Thr		1245
	1250	1255
Pro Ser Pro Gln Glu Glu Leu Gln Pro Met Leu Gln Asp Cys Pro Glu		1260
1265	1270	1275
Glu Thr Gly His Met Gln His Gln Pro Asp Arg Arg Arg Gln Pro Val		1280
	1285	1290
Ser Pro Pro Pro Pro Pro Arg Pro Ile Ser Pro Pro His Thr Tyr Gly		1295
	1300	1305
Tyr Ile Ser Gly Pro Leu Val Ser Asp Met Asp Thr Asp Ala Pro Glu		1310
	1315	1320
Glu Glu Glu Asp Glu Ala Asp Met Glu Val Ala Lys Met Gln Thr Arg		1325
	1330	1335
Arg Leu Leu Leu Arg Gly Leu Glu Gln Thr Pro Ala Ser Ser Val Gly		1340
1345	1350	1355
Asp Leu Glu Ser Ser Val Thr Gly Ser Met Ile Asn Gly Trp Gly Ser		1360
	1365	1370
Ala Ser Glu Glu Asp Asn Ile Ser Ser Gly Arg Ser Ser Val Ser Ser		1375
	1380	1385
Ser Asp Gly Ser Phe Phe Thr Asp Ala Asp Phe Ala Gln Ala Val Ala		1390
	1395	1400
Ala Ala Ala Glu Tyr Ala Gly Leu Lys Val Ala Arg Arg Gln Met Gln		1405
	1410	1415
Asp Ala Ala Gly Arg Arg His Phe His Ala Ser Gln Cys Pro Arg Pro		1420
1425	1430	1435
Thr Ser Pro Val Ser Thr Asp Ser Asn Met Ser Ala Ala Val Met Gln		1440
	1445	1450
Lys Thr Arg Pro Ala Lys Lys Leu Lys His Gln Pro Gly His Leu Arg		1455
	1460	1465
Arg Glu Thr Tyr Thr Asp Asp Leu Pro Pro Pro Pro Val Pro Pro		1470
	1475	1480
Ala Ile Lys Ser Pro Thr Ala Gln Ser Lys Thr Gln Leu Glu Val Arg		1485
	1490	1495
Pro Val Val Val Pro Lys Leu Pro Ser Met Asp Ala Arg Thr Asp Arg		1500
1505	1510	1515
Ser Ser Asp Arg Lys Gly Ser Ser Tyr Lys Gly Arg Glu Val Leu Asp		1520
	1525	1530
Gly Arg Gln Val Val Asp Met Arg Thr Asn Pro Gly Asp Pro Arg Glu		1535
	1540	1545
Ala Gln Glu Gln Gln Asn Asp Gly Lys Gly Arg Gly Asn Lys Ala Ala		1550
	1555	1560
Lys Arg Asp Leu Pro Pro Ala Lys Thr His Leu Ile Gln Glu Asp Ile		1565
	1570	1575
Leu Pro Tyr Cys Arg Pro Thr Phe Pro Thr Ser Asn Asn Pro Arg Asp		1580
1585	1590	1595
Pro Ser Ser Ser Ser Ser Met Ser Ser Arg Gly Ser Gly Ser Arg Gln		1600
	1605	1610
Arg Glu Gln Ala Asn Val Gly Arg Arg Asn Ile Ala Glu Met Gln Val		1615
	1620	1625
		1630

385					390					395					400
Gln	Arg	Pro	Arg	Pro	Thr	Ser	Pro	Phe	Ser	Thr	Asp	Ser	Asn	Thr	Ser
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Gly	Gly														

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Gln	Cys	Pro	Arg	Pro	Thr	Ser	Pro	Val	Ser	Thr	Asp	Ser	Asn	Met	Ser
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Ala	Val	Val	Ile	Gln	Lys	Ala	Arg	Pro	Ala	Lys	Lys	Gln	Lys	His	Gln
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Pro	Val	Pro	Pro	Pro	Ala	Ile	Lys	Ser	Pro	Thr	Val	Gln	Ser	Lys	Ala
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Gln	Leu	Glu	Val	Arg	Pro	Val	Met	Val	Pro	Lys	Leu	Ala	Ser	Ile	Glu
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Ala	Arg	Thr	Asp	Arg	Ser	Ser	Asp	Arg	Lys	Gly	Gly	Ser	Tyr	Lys	Gly
		115					120					125			
Arg	Glu	Ala	Leu	Asp	Gly	Arg	Gln	Val	Thr	Asp	Leu	Arg	Thr	Asn	Pro
	130					135					140				
Ser	Asp	Pro	Arg												
145															